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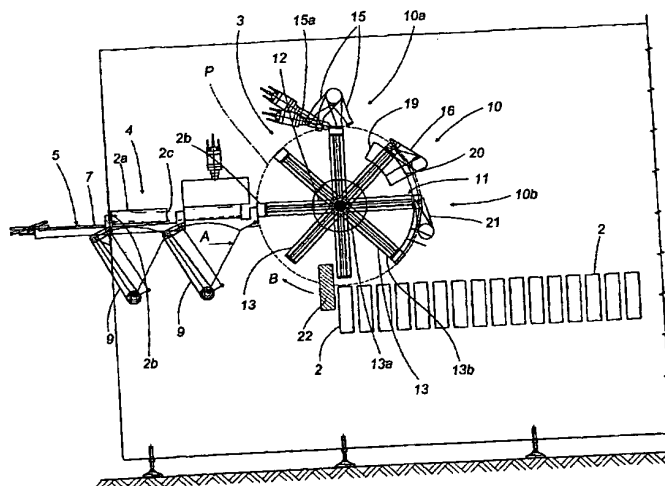
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(54) Title: A SYSTEM FOR FORMING CONTAINERS, IN PARTICULAR CONTAINERS FOR FOOD PRODUCTS



(57) Abstract: Containers (2) for food products are manufactured employing a system that includes a feed station (4) supplying a succession of tubular elements (2a), and a heat sealer (10) positioned to close and secure a first open end (2b) of each tubular element (2a) that coincides with the base of the container. The sealing operation occurs at a station associated with a conveyor (3) consisting in a wheel (11) rotatable in a feed direction (B) along a path (P) passing both through the feed station (4) and through the station occupied by the heat sealer (10). The tubular elements (2a) are carried by radial elements (13) of the wheel (11) such as can be indexed between a first operating position, where the tubular elements (2a) are taken up from the feed station (4), and a second operating position in which the open end (2b) is offered to the heat sealer (10).

WO 2004/011239 A3

WO 2004/011239 A3



*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

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A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 B31B3/32 B31B3/28

**B. FIELDS SEARCHED**

B. FIELDS SEARCHED  
Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 B31B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

C. DOCUMENTS CONSIDERED TO BE RELEVANT		Relevant to claim No.
Category *	Citation of document, with indication, where appropriate, of the relevant passages	

X	DE 35 31 728 A (TETRA PAK INT) 20 March 1986 (1986-03-20) page 7, line 1 -page 10, line 2; figure 1	1-3,10
X	JP 63 082736 A (DAINIPPON PRINTING CO LTD) 13 April 1988 (1988-04-13) figures 1-40	1-8
A	CH 413 339 A (CONTINENTAL CAN CO) 15 May 1966 (1966-05-15) page 2, left-hand column, line 14 -page 3, left-hand column, line 44; figures 1-15	1-4,7
X	US 5 069 021 A (LIEBRAM UDO ET AL) 3 December 1991 (1991-12-03) column 11, line 58 -column 12, line 23; figures 1-3	1-3,9

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
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- \*G\* document member of the same patent family

Date of the actual completion of the International search

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# INTERNATIONAL SEARCH REPORT

International Application No  
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 197 11 799 A (HEIL MICHAEL ;KNUPPERTZ HEINZ WERNER (DE)) 1 October 1998 (1998-10-01) column 5, line 35 -column 9, line 66; figures 1-8,10,11	1-3,9
A	US 4 530 692 A (WILLIAMS DONALD H) 23 July 1985 (1985-07-23) column 3, line 5 - line 20; figures 1-3	10

# INTERNATIONAL SEARCH REPORT

national application No.  
PCT/IB 03/03177

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-8

sealing means comprising first and second joining heads

2. Claim : 9

bending a blank around a former

3. Claim : 10

gripper element for the opposite edges of a flattened tubular blank

# INTERNATIONAL SEARCH REPORT

Int'l Application No  
PCT/IB 03/03177

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